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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,451

11/24/2003

James R. Stoy

X-0150

7117

38393

7590

12/13/2006

CHEVRON SERVICES COMPANY
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EXAMINER

REIFSNYDER, DAVID A

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/721,451

Applicant(s)

STOY ET AL.

Examiner

David A. Reifsnnyder

Art Unit

1723

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 2,3 and 16-19.
Claim(s) objected to: _____.
Claim(s) rejected: 1,4-15 and 20-27.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☒ Other: See Attached.

ADVISORY ACTION

Response to Arguments

Applicant's arguments filed November 20, 2005 have been fully considered but they are not persuasive.

Regarding independent claim 1; the applicant argues on page 7, lines 3-10 of his remarks that independent claim 1 is patentable over Engel (i.e. Engel et al.). The applicant's first argument is that Engel et al. fails to teach a products vessel; however, Engel et al. does teach a vessel (1) which is a "products vessel". The applicant's second argument is that in the present invention, there is a separate reactor (10) and a separate products vessel (32). This argument is not understood because claim 1 only claims a products vessel and does not claim a reactor. Dependent claim 10, claims a products vessel and a reactor vessel; however, even with the addition of the reactor in claim 10, the Examiner believes that vessel (1) can be both a products vessel and a reactor. The applicant's last argument is that even if Engel et al.'s vessel (1) is considered a products vessel the vessel is not configured to receive a portion of the liquid components and the gases from the overflow outlet (i.e the overflow outlet of Engel et al.'s hydrocyclone (12)). The applicant goes on to say that while gases are sent from the overflow outlet of Engel et al.'s hydrocyclones to the products vessel, liquids are not sent from the overflow outlet of Engel et al.'s hydrocyclone to the products vessel, Claim 1 is an apparatus claim not a method claim; therefore, liquids only have to be capable of being sent from the overflow outlet to the products vessel, liquids do not

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have to be sent from the overflow outlet to the products vessel. Since the overflow outlet fluidly communicates with the products vessel; liquids are capable of being sent from the overflow outlet to the products vessel. Furthermore, it is inherent that all of the gas and a minor portion of liquid is removed from the overflow outlet of Engel et al.'s hydrocyclone, while all of the solids and a major portion of the liquid is removed from the underflow outlet of Engel et al.'s hydrocyclone. The reason for this is well known in the art. It is well known in the art that with a solid-liquid-gas hydrocyclone such as Engel et al. there is only two ways for them to operate. In the first mode of operation all of the solids are removed from the underflow outlet, along with a major portion of the liquids, while all of the gas and a minor portion of the liquid is removed from the overflow outlet. In the, second mode of operation all of the solids, all of the liquids and a minor portion of the gases is removed from the underflow outlet, while a major portion of the gas is removed from the overflow outlet. Fig 2 of Engel et al. clearly shows that his hydrocyclone operates in the first mode of operation. Engel et al.'s vessel (1) has an outlet (3) for gas and outlet (5) for liquid, while the pump (30) does not have an outlet for gas. Therefore, trying to pump gas in the pump (30) would ruin the pump.

Regarding independent claim 13; the applicant argues on page 7, lines 20 to page 8, line 2 of his remarks that independent claim 13 is patentable over Engel (i.e. Engel et al.). The applicant's first argument is that Engel et al. fails to teach a products vessel; however, Engel et al. does teach a vessel (1) which is a "products vessel". The applicant's second argument is that in the present invention, there is a separate reactor (10) and a separate products vessel (32). This argument is not understood because

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claim 13 only claims a products vessel and does not claim a reactor. The applicant's last argument is that even if Engel et al.'s vessel (1) is considered a products vessel the vessel is not configured to receive a portion of the liquid components and the gases from the overflow outlet (i.e the overflow outlet of Engel et al.'s hydrocyclone (12)). The applicant goes on to say that while gases are sent from the overflow outlet of Engel et al.'s hydrocyclones to the products vessel, liquids are not sent from the overflow outlet of Engel et al.'s hydrocyclone to the products vessel. It is inherent that all of the gas and a minor portion of liquid is removed from the overflow outlet of Engel et al.'s hydrocyclone, while all of the solids and a major portion of the liquid is removed from the underflow outlet of Engel et al.'s hydrocyclone. The reason for this is well known in the art. It is well known in the art that with a solid-liquid-gas hydrocyclone such as Engel et al. there is only two ways for them to operate. In the first mode of operation all of the solids are removed from the underflow outlet, along with a major portion of the liquids, while all of the gas and a minor portion of the liquid is removed from the overflow outlet. In the, second mode of operation all of the solids, all of the liquids and a minor portion of the gases is removed from the underflow outlet, while a major portion of the gas is removed from the overflow outlet. Fig 2 of Engel et al. clearly shows that his hydrocyclone operates in the first mode of operation. Engel et al.'s vessel (1) has an outlet (3) for gas and outlet (5) for liquid, while the pump (30) does not have an outlet for gas. Therefore, trying to pump gas in the pump (30) would ruin the pump.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Reifsnnyder whose telephone number is (571) 272-1145. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M. Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David A Reifsnnyder
Primary Examiner
Art Unit 1723

DAR